



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,253	07/15/2003	Darko Kirovski	MS1-356USC1	9756
22801	7590	07/28/2005	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			SELLERS, DANIEL R	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/620,253

Applicant(s)

KIROVSKI ET AL.

Examiner

Daniel R. Sellers

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,17,21-23,26,33,34,37-39,42 and 44-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,17,21-23,26,33,34,37-39,42 and 44-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed April 26, 2005 have been fully considered but they are not persuasive.

§102 Rejections based upon Cookson

2. Regarding claim 1, Cookson does teach that two watermarks are inserted into the music, however he is not teaching that two watermarks are inserted into the same segments, he is teaching that two watermarks are in the same audio piece, or file. Cookson also teaches that the watermarks may be selectively placed in the audio file, according to another embodiment only one watermark exists per file (Col. 4, line 64 – Col. 5, line 27 and Col. 9, lines 26-36).

Further Cookson teaches that the weak and the strong watermark occupy different segments of the audio signal. The weak watermark is destroyed by compression (digital compaction), an A/D conversion, or a D/A conversion and the strong watermark survives these different processing techniques (Col. 4, lines 37-43 and Col. 6, lines 44-49). It is understood that the strong watermark must be located in a different manner if it is to survive the compression process.

3. Regarding claim 17, see the preceding argument with respect to claim 1. Cookson indirectly teaches a pattern generator (Col. 2, line 62 – Col. 3, line 7). Cookson teaches a watermark detector to check for the strong or weak watermark (Col. 7, lines 39-48 and Fig. 6). The detector inherently divides the audio signal into multiple portions when using the weak watermark discussed previously. The weak watermark

Art Unit: 2644

replaces some LSB in various samples, so the signal is, in one aspect, divided by samples.

4. Regarding claims 4, 21, 22, 23, 26, 33, 34, 37, and 42, see the preceding argument with respect to claim arguments with respect to the previous office action.

§103 Rejections based upon Cookson and Bloom

5. Regarding claim 38, the further limitation of claim 37, see Bloom

... wherein the watermark insertion unit selectively chooses segments for insertion of the watermarks according to an audible measure of the segments. (Col. 3, lines 14-21, Col. 5, lines 53-61, and Col. 6, line 66 – Col. 7, line 8).

Bloom teaches a method for watermark insertion. Bloom teaches the insertion of two different watermarks, which are disjoint from each other in one of a spatial, temporal, or transform domain (e.g. a frequency domain via a Fourier Transform). Bloom teaches that an audible measure is used (Col. 6, lines 40-42). However Bloom does not teach of a weak watermark. Cookson teaches a watermark detection system, which detects the presence of a weak and/or strong watermark. It would have been obvious for one of ordinary skill in the art to combine the teachings of Bloom with those of Cookson for the purpose of retaining the perceived quality of the audio source.

6. Regarding claim 39 see the preceding argument with respect to claim arguments with respect to the previous office action.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 2644

8. Claims 44-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cookson as applied to claim 37 above, and further in view of Bloom et al. (Bloom), U.S. Patent No. 6,332,194.

9. Regarding claims 44-49, the preceding office action overlooked these claims and now addresses them on their merits.

10. Regarding claim 44, the further limitation of claim 1, see the preceding argument with respect to claim 38. The combination teaches that the watermarks are disjoint and avoid interaction with each other. The combination teaches that the watermarks can be placed in one of a spatial, temporal, or transform domain, wherein the frequency domain is a transform domain.

11. Regarding claim 45, the further limitation of claim 22, see the preceding argument with respect to claim 44. The combination teaches that the watermarks are disjoint.

12. Regarding claim 46, the further limitation of claim 26, see the preceding argument with respect to claim 44. The combination teaches that the watermarks are disjoint.

13. Regarding claim 47, the further limitation of claim 33, see the preceding argument with respect to claim 44. The combination teaches that the watermarks are disjoint.

14. Regarding claim 48, the further limitation of claim 34, see the preceding argument with respect to claim 44. The combination teaches that the watermarks are disjoint.

Art Unit: 2644

15. Regarding claim 49, the further limitation of claim 37, see the preceding argument with respect to claim 44. The combination teaches that the watermarks are disjoint.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel R. Sellers whose telephone number is 571-272-7528. The examiner can normally be reached on Monday to Friday, 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DRS


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600